

23

summing, by one or more processors, weighted sensor readings for the different current operational anomalies in the SDV;

determining, by one or more processors, whether the summed weighted sensor readings exceed a predefined level; and

in response to determining that the summed weighted sensor readings exceed a predefined level, prohibiting, by the SDV control processor, the SDV from operating in the manual mode.

9. The computer-implemented method of claim 1, further comprising:

setting, by one or more processors, a minimum competence level threshold for the control processor competence level and the human driver competence level;

determining, by one or more processors, that neither the control processor competence level nor the human driver competence level meets the minimum competence level threshold; and

in response to determining that neither the control processor competence level nor the human driver competence level meets the minimum competence level threshold, directing, by the driving mode module, the SDV control processor to take control of the SDV and to bring the SDV to a stop.

10. The computer-implemented method of claim 1, wherein the SDV is traveling on a roadway, and wherein the computer-implemented method further comprises:

receiving, from one or more roadway sensors, a width of the roadway; and

further selectively assigning, by one or more processors, control of the SDV to the SDV control processor or to the human driver while the SDV experiences the current operational anomaly based on the width of the roadway.

11. The computer-implemented method of claim 1, further comprising:

in response to control of the SDV being transferred to the SDV control processor, identifying, by one or more processors, a location of a resource provider that has been predetermined to be capable of ameliorating the current operational anomaly in the SDV; and

maneuvering, by the SDV control processor, the SDV to the location of the resource provider.

12. A computer program product for controlling a driving mode of a self-driving vehicle (SDV), the computer program product comprising a non-transitory computer readable storage medium having program code embodied therewith, the program code readable and executable by a processor to perform a method comprising:

receiving sensor readings from a sensor, wherein the sensor readings describe a current operational anomaly in a self-driving vehicle (SDV) that is traveling on a roadway, wherein the SDV is capable of being operated in autonomous mode by an SDV control processor that is on board the SDV, wherein a driving mode module selectively controls whether the SDV is operated in the autonomous mode or in manual mode, and wherein the SDV is controlled by a human driver of the SDV if in the manual mode;

determining a control processor competence level of the SDV control processor, wherein the control processor competence level describes a competence level of the SDV control processor in controlling the SDV while the SDV experiences the current operational anomaly;

receiving a driver profile of the human driver of the SDV, wherein the driver profile describes a human driver

24

competence level of the human driver in controlling the SDV while the SDV experiences the current operational anomaly;

comparing the control processor competence level to the human driver competence level; and

selectively assigning control of the SDV to the SDV control processor or to the human driver while the SDV experiences the current operational anomaly based on which of the control processor competence level and the human driver competence level is relatively higher to one another.

13. The computer program product of claim 12, wherein the method further comprises:

selectively assigning control of the SDV to the SDV control processor or to the human driver based on which of the control processor competence level and the human driver competence level is relatively higher to one another while the SDV experiences the current operational anomaly while traveling on the roadway.

14. The computer program product of claim 12, wherein the current operational anomaly is from a group consisting of a presence of snow tires mounted on the SDV during a first road condition of the roadway, an absence of snow tires mounted on the SDV during a second road condition of the roadway, tire pressure in a tire mounted on the SDV being below a predetermined level, tire tread on a tire mounted on the SDV being less than a predefined limit, a windshield wiper edge of a windshield wiper mounted on the SDV being less than a predefined width, a level of windshield washer fluid in a windshield washer fluid reservoir mounted on the SDV being less than a predefined volume, an inoperable headlamp mounted on the SDV, condensation frosting of windows on the SDV exceeding a predetermined limit, a failure of an antilock braking system in the SDV, a failure of an all wheel traction system in the SDV, and a faulty braking system in the SDV.

15. The computer program product of claim 12, wherein control of the SDV is selectively assigned by an SDV on-board computer on the SDV that controls the driving mode module.

16. The computer program product of claim 12, wherein control of the SDV is selectively assigned by a remote coordinating server that controls the driving mode module.

17. The computer program product of claim 12, wherein the method further comprises:

retrieving driver profile information about the human driver of the SDV;

assigning the human driver of the SDV to a cohort of drivers traveling on the roadway in multiple other SDVs, wherein the human driver of the SDV shares more than a predetermined quantity of traits with members of the cohort of drivers;

retrieving traffic pattern data for the multiple other SDVs being driven by the cohort of drivers while traveling on the roadway;

examining the traffic pattern data to determine a record of accidents for the multiple other SDVs traveling on the roadway while being driven by the cohort of drivers; and

determining the human driver competence level based on the record of accidents for the multiple other SDVs traveling on the roadway while being driven by the cohort of drivers.

18. The computer program product of claim 12, wherein the method further comprises: